

Physiotherapy

Unit 10 – Anatomical Locations

Anatomical Locations

Why is it important to know anatomic locations?

It is important for personal trainers to know anatomic locations as a part of biomechanics.

It helps when using the principles of biomechanics to assess clients' fitness levels.

Anatomical Locations

What are some anatomic locations you are familiar with?

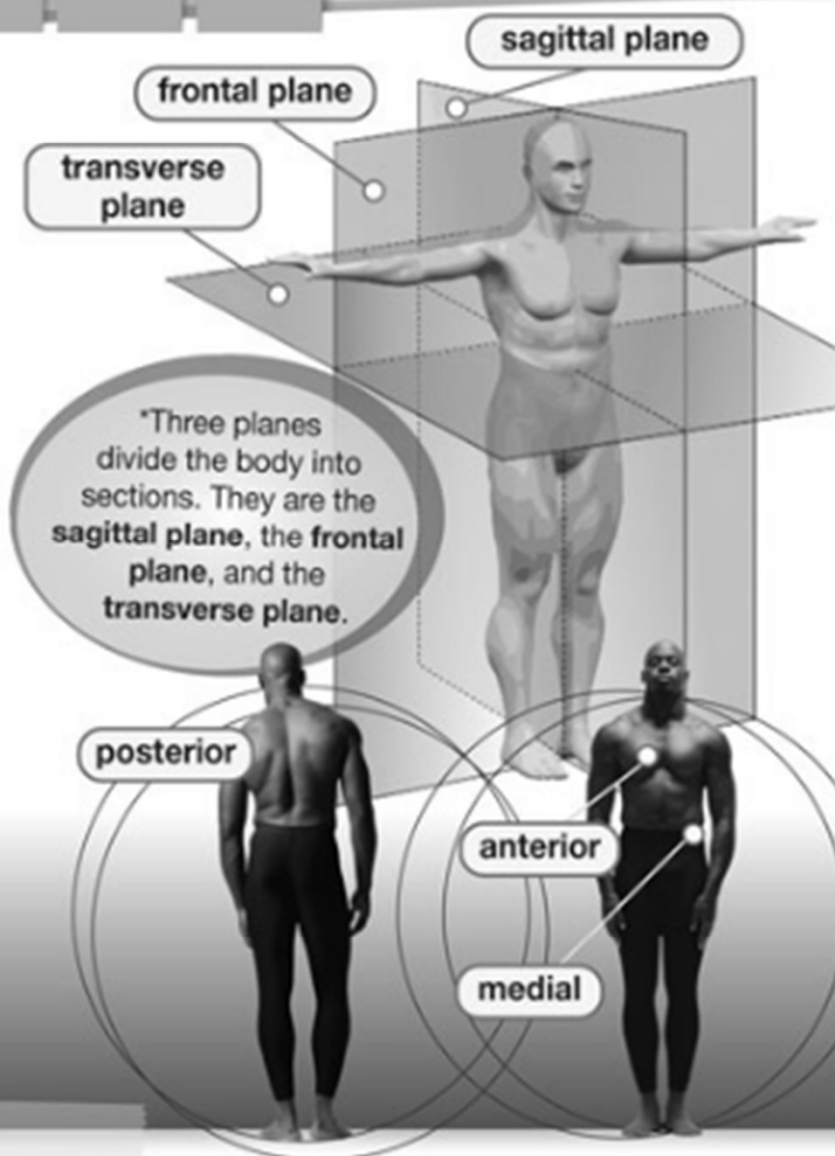
E.g. with anterior (front) and posterior (back).

Those are fairly common terms that people hear.

Also, superior (above) and inferior (below) are also generally used.

10

Anatomical Locations



Anatomical Location Examples

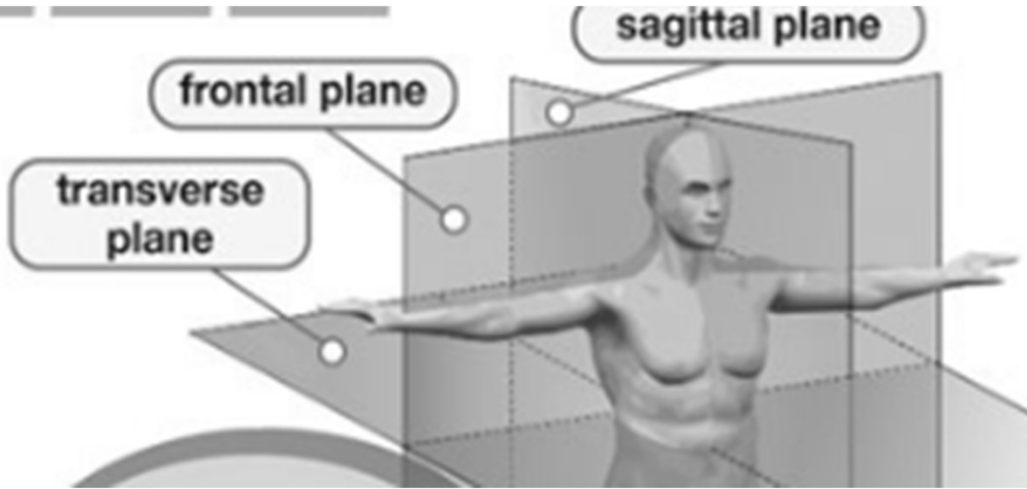
- superior** — The elbow is **superior** to the wrist.
- inferior** — The knee is **inferior** to the hip.
- proximal** — The mouth is more **proximal** to the nose than the ear.
- distal** — The ankle is more **distal** to the chin than the forehead.
- anterior** — The quadriceps are located on the **anterior** portion of the thighs.
- posterior** — The calves are located on the **posterior** portion of the lower leg.
- medial** — The inner thigh muscles are located on the **medial** side of the thigh.
- lateral** — The ears are located on the **lateral** side of the head.
- contralateral** — The left hand is **contralateral** to the right foot.
- ipsilateral** — The right foot is **ipsilateral** to the right hand.



The three planes that divide the body into sections are

the s _____ plane,
the t _____ plane, and
the f _____ plane.

They are set at right angles to divide the body at the center.



The three planes that divide the body into sections are the **sagittal** plane, the **transverse** plane, and the **frontal** plane.

They are set at right angles to divide the body at the center.

Mark the following statements as True or False

The hip is superior to the thigh.

True

A knee is more proximal to an ankle than a toe.

True

Calves are located on the anterior of the lower leg.

False

Listen to a conversation between two physical therapists. Mark the following statements as *True* or *False*.

- 1** The woman was gone because she was sick.
- 2** The woman saw the patient for previous injuries.
- 3** The man treated the patient for pulled muscles.



**Listen to a conversation between two students.
Mark the following statements as *True* or *False*.**

1 The woman was gone because she was sick.

FALSE

.. because she was on a vacation

2 The woman saw the patient for previous injuries.

TRUE

3 The man treated the patient for pulled muscles.

TRUE

Listen again and complete the conversation



PT 1: Thanks for seeing my patients while I was 1) .

PT 2: You're welcome.

PT 1: Is there anything I 2) about?

PT 2: Well, Peter Anderson 3) his leg while playing soccer.

PT 1: Which part?

PT 2: He said he had pain in the 4) of his right thigh, as well as medial thigh pain.

PT 1: I told him it was too soon for him to get back on 5) .

PT 2: I treated him for a 6) and a pulled groin.

PT 1: Thanks for seeing my patients while I was **1) on vacation**

PT 2: You're welcome.

PT 1: Is there anything I **2) need to know** about?

PT 2: Well, Peter Anderson **3) re-injured** his leg while playing soccer.

PT 1: Which part?

PT 2: He said he had pain in the **4) posterior** of his right thigh, as well as medial thigh pain.

PT 1: I told him it was too soon for him to get back on **5) the field**.

PT 2: I treated him for a **6) pulled hamstring** and a pulled groin.

Speaking

8 Complete the conversation below based on Task 7, with the phrases given. Then, take roles and act it out.

USE LANGUAGE SUCH AS:

Is there anything ...?

He had pain in ...

I told him ...

Student A: You are a physical therapist. Talk to Student B about:

- anything you need to know about
- an injury sustained by one of your patients
- the location of the injury

Student B: You are a physical therapist. Talk to Student A about his or her patient.

I told him two weeks ago that he needed to wait a month before getting back on the field.

I really appreciate you seeing my patients while I was away. Which part? Is there anything I need to be aware of?

A:

B: No problem.

A:

B: Yes. Mike Clark played soccer and re-injured his leg.

A:

B: He had pain in his medial right thigh and the posterior of the same thigh.

A:

B: I treated him for a pulled hamstring and a pulled groin.

Superior / Inferior

Cranial / Caudal

- Superior: Towards the head or upper part of a structure; above
- Inferior: Away from the head or lower part of a structure; below

Superior



Inferior



1 What does 'superior' mean?

- 1.** A towards the upper structure
- 2.** B away from the head

2 What does 'inferior' mean?

- 1.** A towards the head
- 2.** B towards the lower part

3 Which is superior: the lungs or the liver?

- 1.** A the liver
- 2.** B the lungs

4 Does anterior refer to the front or the back part of the body?

- 1.** A the front part
- 2.** B the back part

5 What do we call 'medial'?

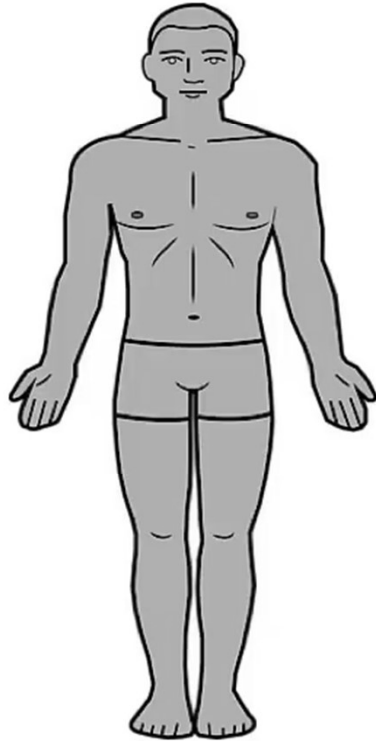
- 1.** A when you move towards the body midline
- 2.** B when you move away from the body midline

6 The wrist bones in relation to the elbow are

- 1.** A proximal
- 2.** B distal

Anatomical Locations

Anatomical Directional Terms



Let's Simplify.....

Medial vs Lateral

Superior vs Inferior

Anterior vs Posterior

Proximal vs Distal

Superficial vs Deep

Unilateral vs Bilateral

Ipsilateral vs Contralateral

Thank you for your attention !